

ANTI-CANCER COMBINATIONS

RELATED APPLICATIONS

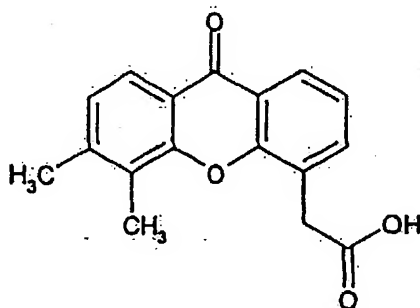
This application is a continuation which claims priority under 35 U.S.C. § 120 to PCT Application Serial PCT/GB02/04025, filed September 3, 2002, which claims priority under 35 U.S.C. § 119 to Great Britain Application Serial No. 0121285.1, filed September 3, 2001, the entirety of which is incorporated herein by reference.

FIELD OF THE INVENTION

The invention relates to compositions comprising combinations of anti-cancer drugs and methods of using the compositions for the the treatment of cancer.

10 BACKGROUND

5,6-dimethylxanthenone-4-acetic acid (DMXAA) is represented by the following formula:



Phase I clinical trials of DMXAA have recently been completed, with dynamic MRI (Magnetic Resonance Imaging) showing that it induces a significant reduction in tumour blood flow at well-tolerated doses. DMXAA is thus one of the first antivascular agents for which activity (irreversible inhibition of tumour blood flow) has been documented in human tumours. These findings are in agreement with preclinical studies using tumours or human tumour xenografts which showed that its antivascular activity produced prolonged inhibition of tumour blood flow leading to extensive regions of haemorrhagic necrosis. However, in such studies

bronchial carcinoma, carcinomas of the cephalic and cervical parts, carcinomas of the thoracic and abdominal regions, cervical and endometrial carcinomas, sarcomas, melanomas, and leukemias.

Animal Models

Cancers

5 Animal models useful according to the invention include but are not limited to the animal model of mammary carcinoma provided in Example 1, and pancreatic carcinoma provided in Example 2. Additional animal models include normal mice injected with a tumor cell line that is representative of a particular tumor or cancer type as provided herein above. Suitable tumor cell lines for the cancers recited above are available from the American Type Culture Collection
10 (ATCC). For example, the following representative cell lines (described on the World Wide Web at ATCC.org, reference provided, incorporated herein in their entirety) are suitable for use in an animal model of the following cancers wherein an normal animal, for example a mouse is injected with the cell line provided: non-small cell lung cancers (ATCC No: CRL-5800, Name: NCI-H23); small cell lung cancers (ATCC No: CCL-257, Name NCI-H1688), breast cancer
15 (ATCC No: HTB-132, Name: MDA-MB-468), cancer of the pancreas (ATCC No: CRL-1687, Name: BxPC-3), ovarian cancer (ATCC No: HTB-161, Name: NIH:OVCA3), colorectal cancer (ATCC No: CCL-251, Name: NCI-H716), prostate cancer (ATCC No: CRL-1435, Name: PC-3), gastric cancer (ATCC No: CRL-1739, Name: AGS), testicular cancer (ATCC No: CRL-1973, Name: NTERA-2 cl.D1), bladder cancer (CRL-1472, Name: HT-1376), colonic carcinoma
20 (CCL-249, Name NCI-H548), parvocellular and non-parvocellular bronchial carcinoma (ATCC No: HTB-168, Name: ChaGo-K-1), carcinomas of the cephalic and cervical parts (CRL-1594, Name: C-41), endometrial carcinomas (ATCC No: HTB-111, Name, AN3 CA), sarcomas (ATCC No: HTB-86, Name: SK-ES-1), melanomas (ATCC CRL-11147, Name: A2058), and leukemias (CRL-10423).